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EXAMINER

PHUONG, DAI

ART UNIT

PAPER NUMBER

2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/674,720

Applicant(s)

HU, TECK

Examiner

Dai A. Phuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed 03/26/2007 have been fully considered but they are not persuasive. Claims 26-34 have been added in response filed on 03/26/2007. Claims 1-34 are currently pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 14 and 25-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Xu et al. (Pub. No: 2003/0172165).

Regarding claim 1, Xu et al. disclose a method of wireless communication (fig. 1A, [0035] and [0036]) comprising:

receiving a multicast control message (fig. 1B, [0051]. Specifically, Xu et al. disclose a multicast server 190 announcing the available multicast sessions to user terminal 110 via multicast data network 105);

determining at least one support requirement for accessing and receiving at least one multicast service, said at least one supportive requirement being indicated by the multicast control message (fig. 1B, [0051]. Specifically, Xu et al. disclose a Service discovery 111 of the terminal 10 provides an operator of user terminal 110 with a list of available multicast sessions

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and the relevant information for each session. The relevant information includes the starting time and cost associated with a multicast session)

selecting a multicast service in response to received multicast control message based on the determined supportive requirement (fig. 1B, [0051]. Specifically, Xu et al. disclose the operator selects a multicast session from the list. In response to the operator's selection, user terminal 110 activates the selected multicast session).

Regarding claim 2, Xu et al. disclose all the limitation in claim 1. Further, Xu et al. disclose the method comprising: transmitting subscription information, the received multicast control message corresponding with the transmitted subscription information ([0045] and [0051]).

Regarding claim 3, Xu et al. disclose all the limitation in claim 1. Further, Xu et al. disclose the method wherein the subscription information comprises at least one of multicast subscription type, payment authentication data, and billing information ([0041], [0045] and [0051]. Specifically, Xu et al. disclose service discovery 111 provides an operator of user terminal 110 with a list of available multicast sessions and the relevant information for each session. The relevant information includes the **starting time and cost associated with a multicast session**.

Regarding claim 4, Xu et al. disclose all the limitation in claim 1. Further, Xu et al. disclose the method wherein the step of receiving a multicast control message is **at least one** or performed during a multicast service setup prior to receiving multicast content ([0041], [0045] and [0051]).

Regarding claim 5, Xu et al. disclose all the limitation in claim 1. Further, Xu et al. disclose the method wherein the step of receiving a multicast control message is performed in real-time, while receiving multicast content ([0052]).

Regarding claim 14, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 25, Xu et al. disclose all the limitations in claim 14. Further, Xu et al. disclose the method wherein receiving subscription information comprises receiving the subscription information from a mobile unit ([0045] and [0051]).

Regarding claim 26, Xu et al. disclose a method of wireless communication comprising:
receiving a multicast control message (fig. 1G and fig. 2A, [0051]);
determining at least one supportive requirement for accessing and receiving at least one multicast service at a mobile unit, said at least one supportive requirement being indicated by multicast control message, and said at least one supportive requirement indicating functionality implemented in the mobile unit for providing said at least one multicast service to a user of the mobile unit (fig. 1G and fig. 2A, [0051]); and

selecting a multicast service in response to received multicast control message based on the determined supportive requirement (fig. 1G and fig. 2A, [0051]).

Regarding claim 27, Xu et al. disclose all the limitation in claim 26. Further, Xu et al. disclose the method wherein the functionality implemented in the mobile unit comprises *at least one of* a display system for conveying multimedia content to the user and channelization codes for accessing and receiving multicast services (fig. 1G and fig. 2A, [0051]).

Regarding claim 28, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 29, this claim is rejected for the same reason as set forth in claim 3.

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Regarding claim 30, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 31, this claim is rejected for the same reason as set forth in claim 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-13, 15-24 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu et al. (Pub. No: 2003/0172165) in view of Trossen et al. (Pub. No: 2003/0157899).

Regarding claim 6, Xu et al. disclose all the limitation in claim 1. However, Xu et al. do not disclose the wherein each multicast service corresponds with at least one multicast rate.

In the same field of endeavor, Trossen et al. disclose the wherein each multicast service corresponds with at least one multicast rate ([0033] and [0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the user terminal of Xu et al. by specifically including each multicast service corresponds with at least one multicast rate, as taught by Sarkkinen et al., the motivation being in order to match data rate over the wireless channel.

Regarding claim 7, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 6. Further, Trossen et al. disclose the method wherein the multicast service is further selected in response to at least one subscriber resource ([0033] and [0035]).

Regarding claim 8, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 6. Further, Xu et al. disclose the method comprising: transmitting at least one feedback signal corresponding with the selected multicast service ([0051]).

Regarding claim 9, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 8. Further, Xu et al. disclose the method wherein the at least one feedback signal conveys an access time to the selected multicast service ([0058] and [0060]).

Regarding claim 10, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 6. Further, Trossen et al. disclose the method of claim 6, wherein the multicast control message comprises at least one of: number of available multicast services ([0027]. Specifically, Tresson et al. disclose in the example shown in FIG. 1, 171, 172, and 173 are layers that are an address can be associated with one or more layers. Conversely, a layer can be associated with one or more addresses.) Layer 173 corresponds to the audio component, layer 172 corresponds to the first video component, and layer 171 corresponds to the second video component. Wireless terminal 101 processes all layers (audio layer 173 and both video layers 171 and 172). Thus, wireless terminal 101 displays fast motion video and plays the music of the Rolling Stone's performance. Wireless terminals 161 and 162 process only layers 172 and 173, and thus display only the slow scan motion video and play the music); at least one resource threshold for each available multicast service ([0062]); at least one identifier for each available multicast service ([0027]); at least one radio access capability requirement for each available multicast service ([0027]); and notification of at least one of termination and continuation of multicast service ([0069]).

Regarding claim 11, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 10. Further, Trossen et al. disclose the method wherein the number of available multicast services are prioritized ([0027] and [0038]).

Regarding claim 12, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 10. Further, Trossen et al. disclose the method wherein the at least one resource threshold corresponds with at least one of allocated power and block error rate ("BLER") ([0033] and [0035]).

Regarding claim 13, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 6. Further, Trossen et al. disclose the method wherein the at least one identifier corresponds with at least one multicast rate associated with each of the number of available multicast services ([0033] and [0035]).

Regarding claim 15, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 16, this claim is rejected for the same reason as set forth in claim 10.

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 12.

Regarding claim 18, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 19, this claim is rejected for the same reason as set forth in claim 11.

Regarding claim 20, this claim is rejected for the same reason as set forth in claim 13.

Regarding claim 21, this claim is rejected for the same reason as set forth in claim 8.

Regarding claim 22, this claim is rejected for the same reason as set forth in claim 9.

Regarding claim 23, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 21. Further, Xu et al. disclose the method wherein receiving said at least one feedback signal comprises receiving said at least one feedback signal in response to determining at least one supportive requirement based on the multicast control message ([0051]).

Regarding claim 24, the combination of Xu et al. and Trossen et al. disclose all the limitation in claim 23. Further, Xu et al. disclose the method wherein receiving said at least one feedback signal comprises receiving said at least one feedback signal in response to selecting the multicast service based on determining said at least one supportive requirement ([0051]).

Regarding claim 32, this claim is rejected for the same reason as set forth in claim 8.

Regarding claim 33, this claim is rejected for the same reason as set forth in claim 9.

Regarding claim 34, this claim is rejected for the same reason as set forth in claim 10.

Response to Argument

5. Applicant, on page 11 of his response, argues that Xu fails to teach or suggest determining and/or receiving information indicative of one or more supportive requirements for accessing and/or receiving multicast services, as set forth in independent claims 1, 14, and 26. With particular regard to independent claim 26, Applicants respectfully submit that Xu fails to teach or suggest determining information indicative of one or more supportive requirements that indicate functionality implemented in a mobile unit for providing at least one multicast service to a user of the mobile unit. However, the Examiner respectfully disagrees.

First, the Applicant used a particular words recited in the claims, e.g., “supportive requirements for accessing” and “functionality implemented in a mobile unit” which are not

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clarity. Therefore, the Examiner will attempt to address the points as best understood. Moreover, during patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550- 51 (CCPA 1969). The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999). See MPEP 2111.

Second, Xu discloses in Fig. 1, paragraph 41 and paragraph 51 that user terminal 110 comprises service discovery 111, multicast session management 112, and multicast security client 113. A multicast server 190 is announcing the available multicast sessions to user terminal 110 via multicast data network 105. The service discovery 111 discovers the multicast sessions that are available. Then the service discovery 111 provides an operator of user terminal 110 with a list of available multicast sessions and the relevant information for each session. The relevant information includes the starting time and cost associated with a multicast session. Upon receiving the a list of available multicast sessions and the relevant information for each session and/or the multicast sessions and/or supportive requirement, the user terminal 110 is able to access and receive multicast session data from the multicast server 190.

Third, Xu discloses in paragraph 51 that after the user terminal 10 receives available multicast sessions data from the multicast server 190, the user terminal 110 displays a list of available multicast sessions to the user or the available multicast sessions data sends by the

multicast server 10 to instructs the user terminal 110's display (functionality implemented in the mobile unit) to provide the list of available multicast sessions to the user. Then the user terminal selects a multicast session from the list.

6. Applicant, on page 11 of his response, argues that Trossen is also completely silent with regard to determining at least one supportive requirement for accessing and receiving at least one multicast service based on information included in the multicast control message, as set forth in independent claims 1, 14, and 26. However, the Examiner respectfully disagrees. Claims 1, 4 and 26 are rejected under Xu et al. (Pub. No: 20030172165), instead of Trossen.

7. Applicant, on page 12 of his response, argues neither of the cited references provide any suggestion or motivation to modify the prior art of record to include determining and/or receiving information indicative of one or more supportive requirements for accessing and/or receiving multicast services, as set forth in independent claims 1, 14, and 26. However, the Examiner respectfully disagrees.

In response to applicant's argument, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen M Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7503.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong
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